

## Claims

What is claimed is:

- 1        1. An apparatus, comprising:  
2            at least one first vertically-oriented plate having a first terminal coupled to a  
3        first bottom side;  
4            at least one second vertically-oriented plate having a second terminal  
5        coupled to a second bottom side; and  
6            a dielectric body, wherein the first vertically-oriented plate and the second  
7        vertically-oriented plate are spaced apart and partially disposed within the  
8        dielectric body.
  
- 1        2. The apparatus of claim 1, further comprising:  
2            a plurality of first vertically-oriented plates coupled to the first terminal; and  
3            a plurality of second vertically-oriented plates coupled to the second  
4        terminal, wherein the plurality of first vertically-oriented plates and the plurality  
5        of second vertically-oriented plates are spaced apart and partially disposed  
6        within the dielectric body.
  
- 1        3. The apparatus of claim 2, wherein the plurality of first vertically-oriented  
2        plates and the plurality of second vertically-oriented plates have a height in  
3        the vertical direction that is greater than a horizontal thickness of the  
4        apparatus including a combined thickness of the plurality of first vertically-  
5        oriented plates and the plurality of second vertically-oriented plates.
  
- 1        4. The apparatus of claim 2, wherein the plurality of first vertically-oriented  
2        plates and the plurality of second vertically-oriented plates are substantially  
3        planar.

1        5. The apparatus of claim 2, wherein the plurality of first vertically-oriented  
2        plates and the plurality of second vertically-oriented plates are substantially  
3        rectangular.

1        6. An apparatus, comprising:  
2        at least one first vertically-oriented plate having a first terminal coupled to a  
3        first bottom side;  
4        at least one second vertically-oriented plate having a second terminal  
5        coupled to a second bottom side; and  
6        a dielectric body, wherein the first vertically-oriented plate and the second  
7        vertically-oriented plate are spaced apart and disposed adjacent the dielectric  
8        body.

1        7. The apparatus of claim 6, further comprising:  
2        a plurality of first vertically-oriented plates coupled to the first terminal;  
3        a plurality of second vertically-oriented plates coupled to the second  
4        terminal; and  
5        a plurality of dielectric bodies, wherein the plurality of first vertically-  
6        oriented plates and the plurality of second vertically-oriented plates are spaced  
7        apart and adjacent at least one of the plurality of dielectric bodies.

1        8. The apparatus of claim 6, wherein a vertical surface area of one of the  
2        plurality of first vertically-oriented plates is more than twice as large as a bottom  
3        surface area of a package housing the plurality of first vertically-oriented plates,  
4        the plurality of second vertically-oriented plates, and the plurality of dielectric  
5        bodies.

1        9. The apparatus of claim 6, further comprising:  
2        a first plurality of pads coupled to the first terminal; and  
3        a second plurality of pads coupled to the second terminal.

1       10. A system, comprising:  
2           a power supply having a source terminal and a return terminal;  
3           a receiver coupled to the power supply;  
4           an antenna coupled to the receiver; and  
5           a capacitor having at least one first vertically-oriented plate having a first  
6       terminal coupled to a first bottom side and to the source terminal, at least one  
7       second vertically-oriented plate having a second terminal coupled to a second  
8       bottom side and to the return terminal, and a dielectric body, wherein the first  
9       vertically-oriented plate and the second vertically-oriented plate are spaced apart  
10      and disposed adjacent the dielectric body.

1       11. The system of claim 10, wherein the antenna comprises an omni-directional  
2       antenna.

1       12. The system of claim 10, wherein the receiver comprises a portion of a  
2       transceiver.

1       13. The system of claim 10, further comprising:  
2           a circuit board coupled to the capacitor, wherein a planar surface of the  
3       circuit board is oriented in a substantially horizontal fashion, and wherein the at  
4       least one first vertically-oriented plate and the at least one second vertically-  
5       oriented plate are oriented in a substantially vertical fashion with respect to the  
6       planar surface.

1       14. The system of claim 10, further comprising:  
2           a plurality of first vertically-oriented plates coupled to the first terminal;  
3           a plurality of second vertically-oriented plates coupled to the second  
4       terminal; and

5           a plurality of dielectric bodies, wherein the plurality of first vertically-  
6           oriented plates and the plurality of second vertically-oriented plates are spaced  
7           apart and adjacent at least one of the plurality of dielectric bodies.

1           15. The system of claim 14, further comprising:

2           a circuit board coupled to the capacitor, wherein a planar surface of the  
3           circuit board is oriented in a substantially horizontal fashion, and wherein the  
4           plurality of first vertically-oriented plates and the plurality of second vertically-  
5           oriented plates are oriented in a substantially vertical fashion with respect to the  
6           planar surface.

1           16. A method, comprising:

2           constructing a capacitor by forming a dielectric body between a first  
3           vertically-oriented plate having a first terminal coupled to a first bottom side and  
4           a second vertically-oriented plate having a second terminal coupled to a second  
5           bottom side.

1           17. The method of claim 16, further comprising:

2           forming a plurality of first vertically-oriented plates to couple to the first  
3           terminal; and

4           forming a plurality of second vertically-oriented plates to couple to the  
5           second terminal.

1           18. The method of claim 17, further comprising:

2           coupling the plurality of first vertically-oriented plates to the first terminal;  
3           and

4           coupling the plurality of second vertically-oriented plates to the second  
5           terminal.

1 19. The method of claim 16, wherein the first vertically-oriented plate and the  
2 second vertically-oriented plate comprise nickel, and wherein the dielectric  
3 body comprises a ceramic material.

1 20. A method, comprising:  
2 operating a field programmable gate array coupled to a capacitor having a  
3 dielectric body disposed between a first vertically-oriented plate having a first  
4 terminal coupled to a first bottom side and a second vertically-oriented plate  
5 having a second terminal coupled to a second bottom side.

1 21. The method of claim 20, wherein operating the field programmable gate  
2 array further comprises:  
3 executing a plurality of Boolean logic instructions.

1 22. The method of claim 20, wherein the capacitor further comprises:  
2 a plurality of first vertically-oriented plates coupled to the first terminal; and  
3 a plurality of second vertically-oriented plates coupled to the second  
4 terminal.

1 23. The method of claim 20, further comprising:  
2 operating a transceiver coupled to the field programmable gate array.

1 24. The method of claim 20, wherein a circuit board having a planar surface  
2 oriented in a substantially horizontal fashion is coupled to the capacitor, and  
3 wherein the at least one first vertically-oriented plate and the at least one  
4 second vertically-oriented plate are oriented in a substantially vertical  
5 fashion with respect to the planar surface.